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SYMPOSIUM: CLINICAL RISK AND JUDICIAL REASONING

Juries and Medical Malpractice Claims

Empirical Facts versus Myths

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Abstract Juries in medical malpractice trials are viewed as incompetent, antidoctor, irresponsible in awarding damages to patients, and casting a threatening shadow over the settlement process. Several decades of systematic empirical research yields little support for these claims. This article summarizes those findings. Doctors win about three cases of four that go to trial. Juries are skeptical about inflated claims. Jury verdicts on negligence are roughly similar to assessments made by medical experts and judges. Damage awards tend to correlate positively with the severity of injury. There are defensible reasons for large damage awards. Moreover, the largest awards are typically settled for much less than the verdicts.

Introduction

In 1988, a task force of the American Medical Association asserted that “problems with medical malpractice juries include decisions that are not based on a thorough understanding of the medical facts and awards that increase at an alarming rate and in a fashion that seems uniquely to disadvantage physicians as compared with other individuals who have acted negligently” [19]. In 2003, the AMA claimed that “[t]he primary cause of the growing liability crisis is the unrestrained escalation in jury awards that are a

part of a legal system that in many states is simply out of control” [1]. In 2008, there were continuing claims of a crisis with calls for a cap on the pain and suffering component of jury awards, presumably because juries are some combination of incompetent, antidoctor, and irresponsible [2, 5, 30].

Systematic empirical research on the jury system collected over the past several decades yields evidence inconsistent with these claims. This brief article will review some of the findings, but to do so, I will also describe the jury system for context.

Incidence, Cost, and Claiming Rates

It is crucial as a first step to acknowledge medical negligence does occur. Even though the size of the estimates of its incidence vary and are contested, even the lowest estimates conclude that annual death rates across the United States for this cause number at least 100,000 persons and many more suffer serious injuries, some of them grave [27, 36].

Estimates of the cost of negligent medical injuries must take into account not only past and future medical expenses but also lost income. One study published in 1989 examined the economic costs for serious birth injuries and injuries that occurred in emergency rooms [28]. Adjusted to 2008 dollars, the average loss for birth injuries was \$2.5 million and for emergency room incidents it was \$2.3 million. For patients who died as a result of negligent emergency room treatment, the economic losses were estimated at \$1.1 million in 2007 dollars.

Research from a number of studies yields estimates that only about one in 25 patients with a negligent or preventable medical claim brought a lawsuit against the health

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provider [4]. There are various reasons why the claiming rates are so low relative to incidence. These include reluctance to sue the doctor who is perceived as trying to help, the tendency to attribute the adverse outcome to the underlying illness for which they sought treatment rather than a result of negligence, and the inability to find a lawyer willing to file a lawsuit because of the low probability of success [36]. Nevertheless, the Henry J. Kaiser Foundation reported that in 2006 there were 12,513 paid claims in the United States, resulting in an aggregate total payment of almost \$4 billion involving approximately 13 out of 1000 active, nonfederal physicians [16].

The Incidence and Outcomes of Jury Trials

Juries decide only about 7% of medical malpractice lawsuits [40, 42]. In 2001, the latest year for which there are reliable figures, the U.S. Bureau of Justice Statistics estimated that in the nation's 75 largest counties there were over 1100 malpractice cases tried before juries [7, 8].

Plaintiffs won only 27% of these trials, about one case in four [8]. However, when the plaintiffs did win, the median award was \$422,000, a figure well above median awards in torts and other civil lawsuits. And 16% of the time, the award equaled or exceeded \$1 million [7]. Punitive damages are rarely awarded in malpractice cases except in cases of gross malfeasance, such as sexual assaults on patients or fraudulent altering of medical records [36]. In 2001, for example, there were only 15 punitive awards out of 1156 medical malpractice trials in the nation's 75 largest counties; the median punitive award in these cases was \$187,000; two punitive awards exceeded \$1 million [7].

The fact that plaintiffs won approximately one case in four tried before a jury—or stated in the obverse, doctors won three out of four trials—suggests that juries do not automatically side with patients over doctors. However, the statistics hide something that needs to be recognized. Some of the patients who lost at trial did not come away empty-handed. In some instances more than one healthcare provider may be named in the lawsuit. For some of the defendants, their legal negligence is reasonably clear and they settle prior to trial, sometimes for major amounts of money, leaving the remaining defendant or defendants. Compared to defendants who settled, the evidence of negligence is relatively weaker against these defendants who remain in the lawsuit and they prevail at trial [34, 36]. This partly explains patients' poor win rates before juries.

As noted above, a substantial portion of jury awards exceed \$1 million; and these cases make the newspaper headlines. Recent research by Vidmar et al. [40, 42] examined comprehensive medical insurers' closed claim files that were required to be reported to the Florida

Department of Insurance. Between 1990 and the end of 2004 there were 801 cases involving payments of \$1 million or more. Only 54 of those payments were made after a jury trial. The rest involved settlements before trial. Of particular interest, there were 115 cases in which a payment of \$1 million or more was paid without a lawsuit ever being filed. Thus, voluntary settlements without a lawsuit were twice as common as payments following jury verdicts. Presumably the no-lawsuit payments were made because the liability was so clear that it made no sense to dispute the case and incur heavy legal fees for a cause that was sure to be lost if the case went to trial. Another finding was that 34 of the cases involved "mega-awards," that is, payments exceeding \$5 million. Only two of these mega-settlements were made after a jury verdict. The rest were settled at an earlier stage in the disputing process. The data also indicated the patients in both types of resolution had suffered very serious injuries such as paraplegia, quadriplegia, severe brain injuries, or death. Some of the deceased persons had survived for weeks in a vegetative state and others had left multiple heirs who were minors [40].

Overall, jury decisions accounted for only 2.3% of paid Florida medical negligence claims. To some degree, however, they probably did cast a shadow over the settlement process. Lawyers tend to negotiate partly around the amount a jury might award if the case goes to trial. Yet, the shadow effect is not as direct as it might seem. Research on samples of insurers' medical malpractice files indicate that insurers tend to settle cases primarily based on whether their own internal reviews by medical experts indicate the healthcare provider violated the standard of care [23, 24]. If they decide the standard has been violated an attempt will be made to settle. Negotiating postures involve not just prior jury awards but prior settlements in cases with similar injuries. Claims proceed to trial only when the plaintiff cannot be convinced that there was no violation of the standard, or if the plaintiff and insurer cannot agree on what constitutes a reasonable amount for the settlement. Contrary to much folklore among doctors about "frivolous cases," no payments tend to be made for claims in which the defense lawyers and liability insurers decide there was no lapse in the standard of care [4].

Juror Skepticism about Lawsuits

There is still an additional reason for plaintiffs winning only slightly one trial in four: juror attitudes. One of the most persistent claims against juries is that they are swayed in favor of the plaintiff by sympathies and hostilities toward doctors. Yet, research consistently contradicts this view. Vidmar found that jurors who served on medical

malpractice trials in North Carolina described their attitudes along two main themes: too many people want to get something for nothing; and most doctors try to help people and should not be blamed for simple human misjudgment or a momentary lapse of concentration [34, 36]. Even in some instances in which they decided for the patient, jurors expressed concern about the decision's adverse effect on the doctor's practice. This juror skepticism about personal injury claims extends beyond medical malpractice cases. Hans and Lofquist [14, 15] conducted interviews with jurors in a large study of cases involving individuals with claims against businesses and health provider defendants. They found that jurors often penalized plaintiffs who did not meet high standards of credibility and behavior, including those who did not appear as injured as they claimed, those with preexisting medical conditions, and those who did not do enough to help themselves recover from their injuries. Thus, despite media accounts of jury irresponsibility, skepticism about getting something for nothing is rooted in American culture [12]. Of course, this does not mean that in every case jurors hold such views. Sometimes trial evidence about a health provider's malfeasance causes jurors to be angry even when they began the trial with open minds [34].

Jury Verdicts Compared to Medical Judgments

A 1998 report of the AMA voiced a common complaint about the ability of layperson jurors to decide medical negligence:

Juries are not optimally suited to decide the complicated issues of causation and duty of care. ...With respect to the major elements of liability—duty of care and causation—the parties must present expert testimony, which the jurors cannot evaluate independently [1].

If this claim is valid, an ideal study would be to compare the judgments of medical doctors to the verdicts rendered by juries. A study by Taragin et al. [31] did just that. The study utilized data from the closed claim files of a medical liability insurer. The insurers had medical doctors closely examine the medical records in cases involving claims of medical negligence to determine if medical negligence had occurred. Taragin et al. [31] compared these judgments with verdicts rendered by juries if the case went to trial. The jury verdicts tended to be consistent with the medical judgments. Moreover, the study found that verdicts were not related to the severity of the injury suffered by the plaintiff, an indication that juries were not basing their judgment out of mere sympathy for a seriously injured patient. Farber and White [13] also compared jury verdicts

to hospital records bearing on negligence. Those authors found that the jury verdicts favored the hospital in all cases that the hospital had rated as not-negligent.

In a 2006 New England Journal of Medicine study by a group of researchers associated with the Harvard School of Public Health [29], a team of medically trained personnel systematically examined the medical records and other data from over 1400 randomly chosen closed insurance claims in four different regions of the United States. Ratings were made as to whether the case involved a negligent error or no negligent medical error. The medical professionals concluded that, overall, $\frac{1}{3}$ of the claims did not involve negligent medical error. Only one nonerror claim in four resulted in a payment. Fifteen percent of the claims (208 cases) were decided at trial. Plaintiffs prevailed only 21% of the time. Nonerror claims, as judged by these physician raters, were twice as likely as error claims to go to trial and $\frac{1}{3}$ as likely to result in a plaintiff win. (Reasons for nonerror claims going to trial include the unreliability or bias in the physician ratings, decisions on the part of plaintiffs to go to trial after investing so much time and money in the discovery phase of the lawsuit and uncertainty in the litigation process, as well as a number of other factors [34].)

None of these studies found a perfect correlation between verdicts and medical personnel. On the other hand, rates of reliability between the medical professionals and assessments are not perfect either. In the New England Journal of Medicine study [29], for example, the medical professionals had high confidence in their judgments of negligent error in only 44% of the cases, with moderate confidence in an additional 30% and low confidence in the remaining 23%. The study of Taragin et al. [31] similarly found that doctors frequently disagreed about the presence or absence of negligence.

Judges Agree with Jury Verdicts

Some studies have asked trial judges to make independent assessments of who should have prevailed in civil cases over which they presided [17, 20, 38]. The judgments were made while the jury was still deliberating and therefore were not contaminated by knowledge of the outcome. The judge's decision was then compared to the jury verdict in that case. Although the research did not specifically focus on malpractice juries (some malpractice cases and other complex cases were in the sample), the findings indicate that there was high agreement between the judge and the jury. Moreover, in instances when the judge would have decided differently than the jury, the judge usually indicated that nevertheless, the jury could reasonably have come to a different conclusion from the trial evidence.

These findings are reviewed in detail in Vidmar and Hans' *American Juries: The Verdict* [38].

Jury Deliberations

The Arizona Jury Study Project involved the in-depth study of 50 Arizona civil juries, including the examination of questions jurors asked of experts and videotapes of their jury room deliberations [11, 35, 38]. Data from that research show jurors are actively involved in scrutinizing expert medical testimony. Jurors in Arizona are encouraged to write down questions that they want a witness to answer. Consider the following example regarding medical testimony about the results of an injury:

Why [are there] no medical records beyond the two years prior to the accident? What tests or determination besides subjective patient's say-so determined [your diagnosis of] a migraine? What exact symptoms did he have regarding a migraine? Why no other tests to rule out other neurological problems? Is there a measurement for the amount of serotonin in his brain? What causes serotonin not to work properly? Is surgery a last resort? What is indomethacin? Can it cause problems if you have prostate problems? [38]

In another accident case, a radiologist testified about a knee injury. Here are the written questions that jurors wanted the witness to answer:

Did you see the tears in the meniscus? Do you see degeneration in young people and what about people of the plaintiff's age? Is a tear in the meniscus a loosening, lack, or gash in the cartilage? Can you tell the age of a tear due to an injury? Can you see healed tissue in an MRI? Do cartilage tears heal by themselves? Can healed tears appear younger [more recent] than they really are? [38]

In still another negligence case, jury deliberations focused on the standard of care. After looking at various exhibits, the jurors' deliberations focused on the standard of care:

Juror 9: [reading from the instructions] It asks whether the defendant, John Cerutti, was negligent, right? This information we are looking at is something that has been approved by both sides, both sides have ...

Juror 5: What page are we on?

Juror 9: Page 10, and I think he was negligent because it says in here, it speaks of basing his processes and procedures according to what other chiropractors

Juror 6: The standard of care!

Juror 9: [continues] At the time as well, okay, I know I saw it ...

Juror 8: [reading] "Chiropractic negligence is the failure to comply with the applicable standard of care. To comply with the applicable standard of care, a chiropractor must exercise that degree of care, skill, and learning that would be expected under similar circumstances of a reasonably prudent chiropractic within this state"

Juror 9: Okay, we're looking at what they've given us, and I'm only talking here, I'm not saying he was negligent as far as causing, it says here, "the defendant negligence was a cause of injury to the plaintiff." I'm not agreeing with that, but I think he was negligent in the fact that he didn't take any notes [regarding the treatment he gave].

Juror 4: Ah, but wait a second, that's care, skill, and learning, and we have to, we aren't looking at whether he took notes, or not, I don't think we are basing this thing on.

Juror 3: He was not required to take notes.

Juror 4: He was not required to and ...

Juror 3: By law.

Juror 4: So there would be no standard at the time.

Juror 9: [reading from the instructions] It says, "... and learning that would be expected under similar circumstances of a reasonably prudent chiropractor within this state." The only other chiropractic they brought as evidence from this state was Dr. Beale.

Juror 3: But, Dr. Beale was making records after the law was in effect.

Juror 9: Okay, so we don't ...

[a few minutes later]

Juror 9: Do we agree, that we believe that the damage, whatever damage that happened, that he's, the alleged damage, if it was caused by Dr. Cerutti, primarily in March and not July 1?

Juror 4: Before we even ask that, does anybody here believe that Dr. Cerutti caused the damage that, uh, Mildred Stuart suffered?

Juror 8: If we agree on that we don't have to go any farther.

Juror 4: I mean, quite frankly, that's the main question, do we believe Dr. Cerutti caused the damage that Mildred Stuart is suffering? [38]

These brief excerpts suggest that juries are anything but passive participants who simply defer to experts or just superficially gloss over the standard of care [21, 22, 37, 38]. And they are consistent with the other data showing agreement between medical experts and jury verdicts. A study by Schuman et al. [26] involved interviews with jurors

following expert testimony in trials, leading them to conclude as follows:

We did not find evidence of a “white coat syndrome” in which jurors mechanistically deferred to certain experts because of their field of expertise. Instead we found jurors far more skeptical and demanding in their assessments.

Jurors made expert-specific decisions based on a sensible set of considerations—the expert’s qualifications, reasoning, factual familiarity and impartiality. Our data do not lend support to the critics who paint jurors as gullible, naïve or thoughtless persons who resort to irrational decision-making strategies that rely on superficial considerations [26].

Damages: The Absence of a “Deep Pocket Effect”

Closely related to the claim of jury sympathy is the charge that juries are more likely to render verdicts against doctors and hospitals, not because they are seen as negligent, but because the jurors perceive them as having the ability to pay large awards. As described in *Business on Trial*, Valerie Hans reviewed evidence from multiple studies regarding business corporations and healthcare providers and could not document systematic evidence of a deep-pockets effect [15]. Vidmar and colleagues conducted experiments that specifically tested for a deep-pockets effect in medical malpractice cases [33, 34, 39, 43]. In one experiment, 147 people called for jury duty were asked to award damages for pain and suffering in the case of a young woman who suffered a broken leg and resulting complications. For one set of jurors, the cause was ascribed to medical negligence. For other jurors, the cause of the broken leg was a motor vehicle accident. There was no statistically significant difference in awards. A second experiment was similar, except that the case involved more severe and permanent injuries. Results again showed no statistically significant difference between awards in the medical malpractice and automobile cases.

Damage Awards Tend to Correlate With Severity of Injury

Bovbjerg et al. [6] found the magnitude of jury awards in a sample of medical malpractice tort cases positively correlated with the severity of the plaintiffs’ injuries, except that injuries resulting in death tended to result in awards substantially lower than injuries resulting in severe permanent injury, such as quadriplegia. However, those authors

concluded that there was considerable variability of damage awards within categories of injury severity. Once again, we have to examine this conclusion in more detail. Michael Saks has used the terms vertical and horizontal equity to categorize issues related to jury variability [25]. Vertical equity refers to the degree to which jury awards are positively related to the seriousness of the injury. Horizontal equity is the degree to which awards vary within levels of injury severity.

While the Bovbjerg et al. [6] findings suggest vertical but not horizontal inequity in jury awards, subsequent research by Sloan and van Wert [28] provided a plausible explanation for the variability, namely that economic losses vary considerably within each level of injury severity. For example, the economic loss for a quadriplegic who is 40 years old with a yearly income of \$200,000 and a family of three young children would ordinarily be much greater than an identical quadriplegic who is retired, widowed, 75 years old, has no dependents, and whose annual income never exceeded \$35,000 [36].

In two studies Vidmar and co-authors examined medical malpractice verdicts in Florida and found that the general damages portion of awards was positively related to severity of the plaintiffs’ injuries [40, 42]. That is, the more serious the injury the higher the mean and median levels of general damages. The exception to this trend was that in cases involving death, the mean and median awards tended to be substantially lower than in cases of very serious permanent disabilities. While these verdict statistics provide no information on the actual basis of the jury’s decisions, there is no evidence that these decisions result from caprice or unwarranted sympathy. Daniels and Martin found a similar pattern in their study [9].

The “Pain and Suffering” Component of Awards

The general damages portion of verdicts is often labeled “pain and suffering.” This component, it is claimed, accounts for the largest portion of medical negligence awards and has provoked calls for limits or “caps” on the amount that can be awarded for these general damages. “Pain and suffering” as an overall description for general damages is an inappropriate label because some of the elements of general damages involve injuries that are not strictly pain and suffering [36]. In medical malpractice cases, for example, negligent administration of a drug that makes the patient permanently psychotic would be a severe trauma that, aside from medication and health care, can have many other economic consequences, including diminished job performance.

Interviews with North Carolina jurors who decided medical malpractice cases provided insights on how jurors

reasoned about such injuries [34]. The jurors reported that they considered the effects of disfigurement and emotional trauma on chances for promotion, the likelihood of a marriage dissolving as a result of the injury, and the economic consequences as well as strict pain and suffering. Vidmar also conducted several experiments to study juror reasoning in malpractice cases [34]. Persons awaiting jury duty in several North Carolina courts were provided with detailed summaries of the injuries of persons injured through medical negligence and asked to award damages for pain and suffering and disfigurement. Senior lawyers, including some retired North Carolina judges, were independently presented with the same documents/facts and asked to indicate their professional judgment about the appropriate award. The data showed that jurors tended to render awards similar to those of legal professionals. The data also showed that jurors' reasoning on damages was similar to that of the professional lawyers and former judges.

The above findings are consistent with substantial bodies of research on attitudes toward plaintiff claims. Vidmar and Hans summarized these findings in a recent book, *American Juries: The Verdict* [38]. Despite the widely accepted media accounts of overly generous juries, these studies suggest that, in general, jurors are skeptical of plaintiff claims about damages, especially pain and suffering. They ask whether the claim of injury is as debilitating as the plaintiff claims it is. They discount the injury if the plaintiff did not take steps to mitigate the effects of the injury. They are skeptical about people wanting something for nothing and about the plaintiff lawyers who have an investment in a large award. Despite judicial instructions that they are to ignore whether the plaintiff has health or other insurance to offset financial losses, jurors speculate about whether the plaintiff has insurance. In the study of Arizona civil juries, insurance was discussed in 34 of 40 trials in which the jury decided the defendant was negligent [10, 38]. Moreover, the data showed that most often it was the plaintiff's insurance rather than the defendant's insurance that was discussed in the jury room [10]. Jury deliberations were punctuated by statements like, "Every time somebody gets hurt they want to sue somebody," and "He had insurance, he [has a job] and had insurance, and much has probably already been paid for" [10].

Regardless, there are instances of awards with large general damages components. Some of these verdicts may indeed be a result of errant juries but there is an alternative explanation. In his research on North Carolina juries Vidmar found that in many of the trials the healthcare defendant fought the case on the grounds that he or she was not negligent, but produced no testimony contesting the plaintiff's estimate of damages [34]. Thus, when the jury

decided the doctor was negligent the jury had only the plaintiff's estimate of damages. Interviews with jurors indicated they were uncomfortable in relying on the plaintiff's financial estimates, but they followed the judge's instructions to decide the case solely on the evidence presented at trial and the only evidence they had was the plaintiff's estimate.

"Mega" Awards

There are, of course, some very large medical malpractice awards. Yet, as described earlier in this article, most of the mega awards in Florida, that is, those resulting in payments of \$1 million or more, were a result of settlements rather than jury trial. Further examination of those cases documented the seriousness of injuries suffered by plaintiffs [42]. The injuries included quadriplegia, massive sepsis, and death 5 months after surgery; an injury requiring radical resection of the throat, a feeding tube; requirement of an electrolarynx to speak and eventual recurrence of cancer and then death; paralysis on left side, permanent bladder catheter, and lifetime assisted living; a newborn child, age 7 at trial, with partial paralysis seizure disorders, inability to speak, and visual impairment. In another instance settlement involved the minor children of an injured patient: a 39-year-old woman was left in a vegetative state and her four minor dependents received annuities. In many instances annuities for lifetime care were purchased as part of the settlement. The expected yield of the annuities over the projected lifetime of the patient indicated that the actual financial cost of the injury was many times the settlement, in one instance over \$13 million.

Explanations for Increased Jury Damage Awards

The Bureau of Justice Statistics study found that in 2001 the median inflation-adjusted verdict in medical malpractice trials when plaintiffs prevailed was \$431,000, compared to \$253,000 in 1992 [8]. Multiple reasons may be offered for the increase. Juries may have become more generous. Patients may have sustained more serious injuries. Alternatively, plaintiff lawyers may have become more adept at "proving" damages by using experts who document economic losses better than in the past. The cost of negligent medical injuries and lost income may have increased. During the 1990s medical costs increased 51.7% and general inflation, which would be reflected in lost wages, increased about 26% [34].

Another explanation is that cases with claims of more serious injuries were tried to juries in 2001, compared to 1992. This last possible explanation needs elaboration.

Vidmar et al.'s study of medical malpractice litigation in Florida, though not focusing exclusively on juries, found that during the first 3 years of the 2000s there were more settled cases involving claims of negligent deaths and fewer cases involving less serious injuries, when compared with the first part of the 1990s [39]. Since settlements typically occur 3 to 6 years after a case is filed, this change in case mix occurred during the middle of the 1990s, not at the turn of the new century. The change in types of cases is unlikely to explain all of the increase in awards, but it does appear to be a possible partial explanation. Like many other aspects of the medical malpractice controversy, the questions about damages are complex and at present we do not have totally satisfactory answers to all the questions that are raised about damages.

Postverdict Adjustments: More about the Jury Trial in Context

Research evidence indicates that large verdicts seldom withstand postverdict judicial review. There are four main processes by which awards are reduced [36, 40, 41]. First, even though we commonly speak of trial by jury, it should properly be called "trial by judge and jury." The jury verdict must be ratified by the trial judge in a "judgment" and he or she may reduce the award if it appears out of line with the evidence. Alternatively, if the judgment is appealed to a higher court, that court may also reduce the award. A third mechanism involves "high-low" agreements that, it turns out, occur with regularity in medical malpractice trials. Sometimes both sides agree that there was negligence but disagree about the amount of damages and decide to have a jury trial but set a high-low agreement prior to the trial. They submit the case to the jury under the condition that if the jury verdict falls below a certain amount, or even if there is a defense verdict, the plaintiff will receive a specified amount of money anyway and if the verdict is above a specified amount the defendant will pay no more than the figure agreed to before trial. In this way both parties are protected against outlier verdicts that either give the plaintiff little or nothing or, alternatively, expose the defendant to an award that could severely injure finances. The public and even the court may be unaware of the agreement. However, most common of all, the plaintiff and the defendant negotiate a posttrial settlement that is less than the jury verdict. The defense threatens to appeal the verdict to a higher court, potentially causing the verdict to be overturned, or resulting in a greatly reduced award. In addition, an appeal increases the plaintiff's legal costs and delays, perhaps for years, the moment when the plaintiff will receive any money. Rather than undertake the risks and delay, the plaintiff settles for a lesser amount [3, 36, 41].

Plaintiffs are willing to negotiate lesser amounts for three main reasons. First, many plaintiffs need or want the money immediately rather than wait for the years it will take to get the money if the case is appealed. Second, there is always a risk that an appeals court will reduce the award or even overturn the verdict. Third, most of these outlier awards greatly exceed the medical provider's insurance coverage. While plaintiffs and their lawyers could attempt to foreclose on the defendant's assets, their lawyers are extremely reluctant to do so and counsel their clients against such actions [3]. Therefore, the plaintiff negotiates a settlement around the defendant's insurance coverage. High-low agreements, too, usually take cognizance of the upper limits of insurance coverage [36].

Several studies report some of the largest malpractice awards that made headlines ultimately resulted in settlements that were only between 5% and 10% of the original jury verdict [18, 39, 41, 42]. Using closed-claim files from Texas, Hyman et al. found that 75% of plaintiffs received a payout less than the verdict [18]. The average settlement for all cases was 29% less than the verdict; and the larger the verdict amount, the greater was the reduction during posttrial proceedings. For plaintiffs with verdicts equaling or exceeding \$2.5 million, 98 received less than the verdict, averaging approximately 56% of the verdict. Hyman et al. [18] found that insurance policy limits were the most important factor involved in the reductions. Of the Florida medical malpractice cases involving verdicts of \$1 million or more, the mean settlement was 67% of the original jury verdict [42].

Limitations of the Data

Both quantitative and qualitative data are represented in this review of literature. The quantitative data from Florida and Texas are comprehensive of all malpractice claims since state law requires that all malpractice claims, even those settled without a payment, be reported to the respective Departments of Insurance. The North Carolina data is based on a comprehensive survey of all 100 North Carolina courts. Data collected by the U.S. Bureau of Justice Statistics (BJS) was based on a plan involving comprehensive collection of all cases in the 75 largest U.S. jurisdictions. These latter data are reasonably complete although the author of this article discovered that some cases in Chicago and Philadelphia were not included because they were being appealed and the records were not available when the survey occurred. It is likely that the BJS under-represent large awards because these are the cases most likely to be appealed. The qualitative data are based on smaller samples and, of course, are subject to unreliability of coding and interpretation, even when attempts are

made to obtain reliability checks. For example, studies involving physician ratings of whether negligence occurred find some considerable inter-rater disagreement. Interviews with lawyers about litigation strategies, including ones conducted by the author of this article, are, of course, always subject to unreliability and bias even when precautions are taken to avoid such problems. Yet taken as a whole, the data, both quantitative and qualitative, show remarkable consistency across settings and between researchers.

Discussion

Trial by judge and jury is an important component of the American tort system bearing on claims of medical negligence. However, it is only one part of that system, despite the attention it receives. Most settlements of malpractice claims occur around the negotiation table rather than in the jury room. Widely held views of irresponsible and incompetent juries held by doctors and by the general public do not stand up to empirical evidence. This is not to say that every jury verdict is correct, but when verdicts for plaintiffs are compared against verdicts for doctors and against alternative criteria, such as ratings by medical professionals and decisions by legal professionals, juries come out reasonably well. Qualitative data from juror interviews and actual jury deliberations support the quantitative findings. These conclusions suggest the need to focus on other parts of the claims resolution process and other factors that affect professional liability insurance increases, including the professional liability insurance cycle [4].

References

1. American Medical Association. Medical liability reform: Q&A. Available at: http://www.ama-assn.org/ama1/pub/upload/mm/399/mlr_tp.pdf. Accessed September 29, 2008.
2. American Medical Association. Medical liability reform. Available at: <http://www.ama-assn.org/ama/pub/category/7861.html>. Accessed February 4, 2008.
3. Baker T. Blood money, new money and the moral code of the personal injury bar. *Law & Soc'y Rev.* 2002;35:257–319.
4. Baker T. *The Medical Malpractice Myth*. Chicago, IL: University of Chicago Press; 2005:22–44, 45–67.
5. Bazzoli F. New AMA report cites effectiveness of malpractice award limits. *Health Care Finance News*, 02/06/08. Available at: <http://www.healthcarefinancenews.com/story.cms?id=7621>. Accessed August 6, 2008.
6. Bovbjerg R, Sloan F, Blumstein J. Valuing life and limb in tort: scheduling “pain and suffering.” *NW UL Rev.* 1989;83:908–976.
7. Cohen T. Tort trials and verdicts in large counties. *Bureau of Justice Statistics Bulletin* #NCJ 206240; November 2004. Available at: www.ojp.usdoj.gov/bjs/pub/pdf/ttvlc01.pdf. Accessed November 5, 2008.
8. Cohen T. Medical malpractice trials and verdicts in large counties, 2001. *Bureau of Justice Statistics Bulletin* #NCJ 203098; April 2004. Available at: www.ojp.usdoj.gov/bjs/pub/pdf/mmtvlc01.pdf. Accessed November 5, 2008.
9. Daniels S, Martin J. *Civil Juries and the Politics of Reform*. Evanston, IL: Northwestern University Press, 1995:92–151.
10. Diamond S, Vidmar N. Jury room ruminations on forbidden evidence. *Virginia Law Rev.* 2001;87:1857–1915.
11. Diamond S, Vidmar N, Rose M, Ellis L, Murphy B. Juror discussions during trial: studying an Arizona innovation. *Arizona Law Rev.* 2003;45:1–82.
12. Engel D. The oven bird's song: insiders, outsiders, and personal injuries in an American community. *Law & Soc'y Rev.* 1984;18:551–582.
13. Farber H, White M. A comparison of formal and informal dispute resolution in medical malpractice. *J Legal Stud.* 1991;23:777–806.
14. Hans V, Lofquist W. Perceptions of civil justice: the litigation crisis attitudes of civil jurors. *Behav Sci Law.* 1994;12:181–196.
15. Hans V. *Business on Trial: The Civil Jury and Corporate Liability*. New Haven, CT: Yale University Press, 2001:50–179.
16. Henry J. Kaiser Family Foundation: *State health facts*. Available at: <http://www.statehealthfacts.org>. Accessed August 6, 2008.
17. Heuer L, Penrod S. Trial complexity: a field investigation of its meaning and effects. *Law & Hum Behav.* 1994;18:29–52.
18. Hyman D, Black B, Zeiler K, Silver C, Sage W. Do defendants pay what juries award? Post verdict haircuts in Texas medical malpractice cases:1988–2003. *J Empirical Legal Stud.* 2007;4:3–68.
19. Johnson K, Phillips C, Orentlicher D. A fault-based administrative system for resolving medical malpractice claims. *Vand L Rev.* 1989;42:1365–1406.
20. Kalven H, Zeisel H. *The American Jury*. Chicago, IL: University of Chicago Press, 1966:56–65.
21. Kutnjak-Ivokovic S, Hans V. Jurors Evaluation of Expert Testimony, Judging The Messenger and the Message. *Law & Soc Inquiry.* 2003;28:441–482.
22. Mello M, Hemenway D. Medical malpractice as an epidemiological problem. *Soc Sci Med.* 2004;59:39–46.
23. Peeples R, Harris C, Metzloff T. Settlement has many faces: physicians, attorneys, and medical malpractice. *J Health Soc Behav.* 2000;41:333–246.
24. Rosenblatt R, Hurst A. An analysis of closed obstetric malpractice claims. *Obstet Gynecol.* 1989;74:710–713.
25. Saks M. Medical malpractice: facing real problems and finding real solutions. *William & Mary Law Rev.* 1994;35:693–720.
26. Schuman D, Whittaker E, Champagne A. An empirical examination of the use of expert witnesses in the courts—part two: a three city study. *Jurimetrics J.* 1994;34:193–206.
27. Sloan F, Chepke L. *Medical Malpractice*. Cambridge, MA: MIT Press. 2008;58–62:166–170.
28. Sloan F, van Wert S. Cost of injuries. In: Sloan F. *Suing for Medical Malpractice*. Chicago, IL: University of Chicago Press, 1993:123–152.
29. Studdert DM, Mello MM, Gawande AA, Gandhi TK, Kachalia A, Yoon C, Puopolo AL, Brennan TA. Claims, errors and compensation payments in medical malpractice litigation. *N Engl J Med.* 2006;354:2024–2033.
30. Surrell A. Cap on noneconomic damages is unconstitutional, judge says. AM News, June 2, 2008. Available at: <http://www.ama-assn.org/amednews/2008/06/02/prsa0602.htm>. Accessed August 1, 2008.
31. Taragin M, Willett L, Wilczek A, Trout R, Carson J. The influence of standard of care and severity of injury on the

- resolution of medical malpractice claims. *Ann Intern Med.* 1992;117:780–784.
32. U.S. Department of Labor. Medical care inflation continues to rise. *Monthly Labor Review.* Available at: <http://www.bls.gov/opub/ted/2001/May/wk4/art01.htm>. Accessed May, 29, 2001.
 33. Vidmar N. Empirical evidence on the “deep pockets” hypothesis: jury awards for pain and suffering in medical malpractice cases. *Duke LJ.* 1993;43:217–266.
 34. Vidmar N. *Medical Malpractice and the American Jury.* Ann Arbor, MI: U. Michigan Press. 1995;69–94; 221–236–248.
 35. Vidmar N. Listening to jurors and asking them questions. *Trial Briefs.* 2002;August:9–13.
 36. Vidmar N. Medical malpractice lawsuits: an essay on patient interests, the contingency fee system, juries and social policy. *Loy LA L Rev.* 2005;38:1217–1266.
 37. Vidmar N, Diamond S. Juries and expert evidence. *Brook L Rev.* 2001;66:1121–1180.
 38. Vidmar N, Hans V. *American Juries: The Verdict.* Amherst, NY: Prometheus Books; 2007;147–190, 281–302.
 39. Vidmar N, Lee J, Cohen E, Stewart A. Damage awards and jurors’ responsibility ascriptions in medical versus automobile negligence cases. *Behav Sci Law.* 1994;12:149–160.
 40. Vidmar N, Lee P, MacKillop K, McCarthy K, McGwin G. Jury awards for medical malpractice and post-verdict adjustments of those awards. *DePaul Law Rev.* 2005;54:315–356.
 41. Vidmar N, MacKillop K. “Judicial hellholes,” medical malpractice claims, verdicts and the “doctor exodus” in Illinois. *Vand L Rev.* 2006;59:1309–1342.
 42. Vidmar N, MacKillop K, Lee P. Million dollar medical malpractice cases in Florida: post-verdict and pre-suit settlements. *Vand L Rev.* 2006;59:1343–1381.
 43. Vidmar N, Rice J. Assessments of non-economic damage awards in medical negligence: a comparison of jurors with legal professionals. *Iowa L Rev.* 1993;78:883–912.